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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,569	03/17/2004	Fengchun Chen	14556.1US01	3492
23552 7590 02/22/2008 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903				
EXAMINER				
JACKSON, DANIELLE				
ART UNIT		PAPER NUMBER		
3636				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/802,569

**Applicant(s)**

CHEN, FENGCHUN

**Examiner**

DANIELLE N. JACKSON

**Art Unit**

3636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-3, 5 and 7 is/are rejected.  
7) ☒ Claim(s) 4 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date 6/21/04  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

Claim 6 has been withdrawn because it is drawn to species L, which is a non-elected species.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tyminski (US-1,042,174).

Claim 1: Tyminski discloses an umbrella including an umbrella column (1, 2), supporting arms (11), tarpaulin (not shown), cover arms (9, 20) supporting the tarpaulin, a develop-fold mechanism (14, 15), an upper umbrella disk (8) fixed on top of the umbrella column, and a lower umbrella disk (12) moveable up and down along the umbrella column, wherein one end of the cover arms being hinged on the upper umbrella disk, one end of the supporting arms being hinged on the lower umbrella disk and the other end of the supporting arms being hinged at the middle of the cover arms, characterized in that: moving the lower umbrella disk in a downward direction away from the upper umbrella disk by the develop-fold mechanism opens the umbrella, and moving the lower umbrella disk

upward towards the upper umbrella disk folds the umbrella, and each of the cover arms is composed of an upper cover arm (9) and a lower cover arm (20) being hinged together via a position limiting hinge (7, 24) which serves for limiting the developing angle of the cover arm.

Claims 2 and 3: Tyminski teaches the umbrella column to be of two section (1, 2), each section being connected via a length-dimension-shortening device, which is comprised of a screw-thread-fit structure having a matching screw hole (as seen in FIG. 2) and a screw bolt, wherein the screw hole has an internal thread so the two adjacent ends of the umbrella column can be connected.

Claim 5: Tyminski teaches the position limiting hinge to have the following structure: a lug (7) and pivot (24) provided on the side of the ends of the upper cover arms and the lower cover arms facing the tarpaulin.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tyminski (US-1,042,174) in view of Biderman (US-3,156,249).

Tyminski lacks a pressure spring. Biderman teaches an umbrella having an upper umbrella disk (13) and a lower umbrella disk (15) wherein a pressure

spring (17) is located between said disks. It would have been obvious to one of ordinary skill in the art at the time the invention was modify Tyminski to include a pressure spring, as suggested by Biderman, so that when opening the umbrella, it is easier to force the lower umbrella disk in a downwards direction away from the upper umbrella to an unfolded position.

***Allowable Subject Matter***

3. The first portion of claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The second and thirds portions (the portions drawn to the worm embodiment and the screw lock embodiment) are drawn to non-elected species, so claim 4 would be considered allowable if the second and third portions are cancelled.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIELLE N. JACKSON whose telephone number is (571)272-2268. The examiner can normally be reached on Monday through Friday 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on (571) 272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. N. J./  
Examiner, Art Unit 3636

/David Dunn/  
Supervisory Patent Examiner, Art Unit 3636